

The Final 3-Dimensional Shape of the Protein

Once the secondary structures of a protein have been folded, the model must be given the correct overall shape. When doing this it is very useful to refer back to the online visualization environment. This display can be edited to match what the final physical model should look like.

The display shown below, for example, has a backbone of 300, has the first and last amino acids in the chain colored to match the end caps, and has the four key amino acid sidechains shown as a spacefill of 300.

Using this display, the entire protein can be folded into its correct shape. It is often useful to examine and view the protein structure from several different views - maybe from the front, the side, and the top view. Referring back to the interactive 3D display can also help a team rotate the sidechains into their exact correct 3-dimensional locations.

